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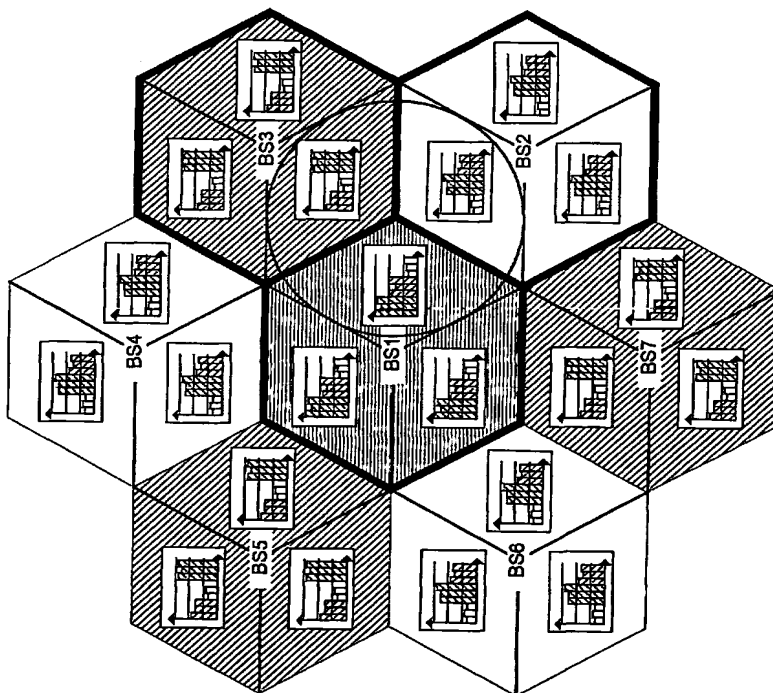
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- (71) Applicant (for all designated States except US): **MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD.** [JP/JP]; 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WENGERTER, Christian** [DE/DE]; Bahnhofstrasse 10d, 63924 Kleinheubach (DE). **GOLITSCHKE EDLER VON ELBWART, Alexander** [DE/DE]; Wilhelminenstr. 32, 64285 Darmstadt (DE).
- (74) Agent: **KUHL, Dietmar**; Grünecker, Kinkeldey, Stockmair & Schwanhäusser, Maximilianstrasse 58, 80538 München (DE).
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(54) Title: TRANSMISSION POWER RANGE SETTING DURING CHANNEL ASSIGNMENT FOR INTERFERENCE BALANCING IN A CELLULAR WIRELESS COMMUNICATION SYSTEM



(57) Abstract: The present invention relates to a method for balancing the distribution of interference between radio cells in a wireless communication system comprising cells in which subcarrier blocks are used for communication. A number of adjacent cells build a cell cluster. Moreover, the present invention relates to a corresponding method adapted for use in a system in which multi beam antennas or multiple antennas are used. Furthermore, the present invention relates to base stations performing the above method as well as a communication system comprising the base stations. To reduce the large average SIR variations without causing additional SIR estimation, measurement and calculation problem as introduced with power control the invention suggests to group subcarrier blocks into a plurality of subcarrier block sets in each cell of a cell cluster, to determine transmission power ranges for each of the cells of said cell cluster, and to assign transmission power ranges to the subcarrier block sets to perform TPC within the ranges.



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